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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,501	01/15/2004	Dong-Han Lee	1793.1152	4624

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EXAMINER

EDUN, MOHAMMAD N

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/26/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/757,501	LEE, DONG-HAN	
	Examiner	Art Unit	
	MUHAMMAD N. EDUN	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 22 is/are rejected.
- 7) ☒ Claim(s) 17-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4, 5, 7, 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii (5,309,249) in view of Tadashi (JP 59042667).

Ishii discloses the invention substantially as claimed, however does not the diode emits different color beams. Ishii discloses the apparatus for displaying a status of an optical disk apparatus having the means and steps for: determining a type of an optical disc loaded into the tray (see steps S4 and S7, that determine the type of optical disk for example CD-DA, CD-I); and transmitting a predetermined signal based on the determination result to a plurality of diodes (77) in accordance with the determining type

(i.e. displaying the output to the diodes (77) representing pointers for the operator to make a selection, based on the type of disk determined, see steps S10, S8 and S5, Figs. 3 and 7, and column 7-8), as set forth in claims 1, 2, 4, 5, 7, 16 and 22. The reference further teaches: the emission mode of the diode is changed based on which operation is performed on the optical disk (see steps S10, S8 and S5), as set forth in claim 2 and 5; and the diodes includes at least first and second diodes (or LEDs, see column 4, lines 56-57), as set forth in claim 16.

Tadashi teaches that it is well known to have two or more luminous colors whose colors are different (for example blue and red) to inform an operator of information to be displayed, by switching the luminous colors based on the desired display output.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the diodes of Tadashi such that they included different colors representing the different types of disk, as taught by Tadashi, since such a modification would more clearly inform the operator of the type of disk inserted and operation mode desired, thereby reducing the possible of errors during operation.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii (5,309,249) in view of Tadashi (JP 59042667) as applied to claims 1, 2, 4, 5, 7, 16 and 22 above, and further in view of common Knowledge in the art.

As discussed above, Ishii in view of Tadashi disclose the invention substantially as claimed, however does not specifically teach the diodes include a blink mode for operation, as set forth in claims 3 and 6.

It is well known in the art to have the display blink, such as a blinking LED, in order to indicate to the user a different mode of operation, for example during a waiting period from the operator, or a time sequence indication the system is busy etc..

It would have been obvious for one of ordinary skill in the art at the time the invention was made to having the pointer LED of Ishii blink, while awaiting an operation from the operation, as well known in the art, in order to provide a more clear visual indication that the system is waiting for the operator input, thereby avoiding confusion of when to press the button, and thus reducing the risk of damaging the device.

Claims 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii (5,309,249) in view of Tadashi (JP 59042667) as applied to claims 1, 2, 4, 5, 7, 16 and 22 above, and further in view of Tsuchiya et al. (6,201,777).

As discussed above, Ishii in view of Tadashi discloses the invention substantially as claimed, however does not specially teach detecting an S-Curve signal from the recording surface of the optical disk, and the disk recording surface is either 1.2 mm or 0.6 mm, as set forth in claims 8-15.

Tsuchiya et al. teaches that it is well known to discriminate the different types of optical disk, such as optical disks having the recording surface thickness of 0.6 mm or 1.2 mm (see Figs. 1-4 and 12-15), by detecting the S-Curve signal from the recording surface of the disk (see for example Figs. 7a-7c, and column 7, lines 25-52).

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to include a disk discrimination process that detects the S-Curve signal from the recording surface of the optical disk, and further to include optical disks having recording surface thickness of 0.6 mm and 1.2 mm, as taught by Tsuchiya et al., since such a modification would make the apparatus more diverse to different types of optical disk by a simple adjustment, thus expanding the operation ability of the optical disk apparatus.

Allowable Subject Matter

Claims 17-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record alone or in combination does not teach or suggest the apparatus of claim 16 having the combination of element with their recited functions, along with having the further limitations as set forth in claims 17-21.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUHAMMAD N. EDUN whose telephone number is 571-272-7617. The examiner can normally be reached on FLEXITIME.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MUHAMMAD N EDUN
Primary Examiner
Art Unit 2627